UTD982590002

U.S. EPA REGION VIII
TECHNICAL ENFORCEMENT PROGRAM
RCRA COMPLIANCE INSPECTION REPORT

Facility:	HECLA Pond 15 miles West of St. George St. George, Utah
Facility Contact:	Dave Suhr Environmental Manager Idled Properties
Telephone Number:	
EPA I.D. No.:	UT
Notification Status:	
Inspection Type:	Compliance Evaluation Inspection
Date:	November 16, 1998
Time In:	November 16: 8:15 a.m.
Time Out:	November 16: 5:20 p.m.
Weather:	Clear, Cool
EPA Representatives:	Linda Jacobson, EPA Inspector Donna Inman, EPA Inspector Sue Groves, Tribal Assistance Program
Facility Representatives:	Dave Suhr Gary Gamble, Environmental Manager
BIA Representatives:	Effie Delmar Pat Brewer
Tribe:	Charlotte Domingo
OMG-Apex:	Scott Grove Penny Bassett Ahn Mai

Sally called Linda Jacobson to clarify if this is Hecla or OMG. She confirmed Hecla

Background and Scope:

Presented credentials. Entry gained by consent as noted on NOI form.

OMG-Apex

Penny: no current RCRA i.d. number. Still OMG-Apex

Hecla: no EPA i.d. number

Donna: records: process records, equipment maintenance, invoices, testing of materials--out of process,pond, flow records, use/discharge

Hecla Pond
-no NPDES number/SDW number

Donna: see if pond discharges; excessive erosion of cap or ponds

Hecla: approximtely 500 feet diameter

Pat Brewer: Hecla has approximately 8 1/2 acres (8.28 acres) OMG has 173 acres. Hecla solely responsible for releases from its leased land.

Gary: leaks onto OMG; OMG and tribe. If leaks onto tribe, deal with tribe.

Donna: have to sample this p.m.

Ahn: want to explain OMG to tribe and to BIA; explain at 1 p.m.

OMG representatives then left and HECLA discussion continued.

HECLA

Gary: purchased operation in 1988/89 prior St. George Mining Company. Apex Mine (old cobalt mine) associated with it. St. George extracted germanium/gallium during their operations from 1985-1987. Apex operated from 1988-1990, not economical. Also had copper electrowining circuit.

1992-facility brought in cobalt (Ahn Mai manager then) products were cobalt sulfate; operated until 1995 when sold to OMG.
until 1992, wastes were Bevill excluded.
-ponds had mining wastes and some sludges from cobalt operation (not Bevill excluded).
-removed wastes and consolidated into 1 pond, occurred from 1995 over next couple of years-bulk occurred in 1996.

Ponds 1, 2, 3, always lined
Pond 2 never used by Hecla but by St. George.

-All ponds were lined
Ponds 1 and 3 Hecla reconstructed as double-lined ponds
Ponds 1 and 3 asphalt lined (when used by St. George).
All ponds held Bevill exempt wastes.
Cobalt wastes added to Ponds 1 and 3.
removed all wastes and put into Hecla Pond.

Hecla Pond--Old St. George Mining Company Pond
-originally contained tailings from St. George
-Pond 2 material removed (1991)--put in Hecla Pond
-1996, removed Pond 1, removed liner and all. Pond 3--tried to salvage liner--removed by evaporation of liquids and dredging of solid material. Patched liner leaks.

dimensions--not know
-have to locate--volume of waste

Hecla Pond--called Pond 2 and Pond 2 was Pond 2A
-materials moved to Hecla Pond--dike buildt and cover placed on it.

Dave: Evap. pond--is located at low spot in pond
-ponds next to Pond 3; consolidated material in approximately 1992 into Pond 3.

OMG replaced liner in pond 1.

Gary: lined, asphalt liner--St. George Mining Company
Dave: liquid out--evaporates
-not sure--evaporations removes it
-sampled liquid
-RCRA metals
Gary: ore body contained high levels of As, Pb, Cd--ore >1% As.

Donna: analysis for Co levels
Dave: not sure if looked for copper
-could be organics; 3 different solvent extraction circuits; solvent floated (frothing in pond). Loose a bit of organic; recycled solvent into process. Materials had to test non-hazardous. Precip., filter, store, sample--TCLP, take to pond--hazardous waste shipped offsite to U.S. Ecology, Beatly, Nevada.

Dve: shipped off hazardous waste, when Hecla ran plant. 1990--St. George brought wastewater sludge containing gallium--never processed--sent off--may have been LQG. --Cobalt sludge (non-hazardous waste)--non-RCRA material--all materials in pond were tested as non-hazardous.

Me: permits?

Gary: facility not use water as drinking water. NRC permit. Had nuclear density gauges. NRC license--may not have had license either--may have been registered with State.
Dave: tested every 6 months

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-disposed of these also.
Gary: no regulatory involvement during capping
Dave: base materials from original ponds next to Pond 3 were used for capping

Gary: capping--dirt--not clay, no material specs.; re: compacting

Dave: capping varied from 1 to 4 feet (Ponds 3B and 3C dug up and put in Hecla Pond)

Gary: explained overview of Bevill exemption fell under it.
-dome-shaped cap--designed water to flow off edges
-weight squeezed liquid into evaporation cell
-after stop loosing water--put final cap on it
-solvents only used for gallium/germanium, not cobalt operations.

Gary: solvents--basically kerosene with some detergents.

Me: other waste types

Gary: waste oil recycled
-flammable--thinner--shipped off once
-some shipped to U.S. Ecology
-filter cake filters--contaminated--shipped off to U.S. Ecology
-not sure vehicle maintenance, oil changes
-no listed solvents.

Dave: fence, 6 feet high
-completely fenced
-inspect/maintain
Gary: local guy hired to check on things
-not documented inspections/maintenance
Dave: looks for erosiion, check if pond intact, fence condition
-no sampling
-not think pond discharges
-approximately 8 inches deep, pond is 15 to 20 inches deep
-evaporation pond is HDPE lined
-channel to it; directs water into low spots

Me: long-term plans
Dave: put cap on it and revegetate it
-lease indefinitely
-3 wells drilled
-gw flows toward Santa Clara River
-no wells to monitor pond
-groundwater is 300 feet deep
-3 groundwater wells are triangulated

Gary: 3 wells, triangulated
-did enhanced evaporation
--on map
-1c had mining materials in it

-numerous ponds, St. George Mining segregating these out.

-Hecla Ponds
1 A/B - slurry of production wastes
1 C - not used
2 - contained St. George tailings and Hecla Materials
2A - tailings (St. George) only
3A - excavated St. George and slurry of production wates
3B - not used by Hecla, mining materials from St. George
3C - not used by Hecla, mining materials from St. George

-added limestone to neutralize pH and to tie up metals

1 A/B - 2 ponds when St. George had it--excavated and made it
1 as HDPE pond

2A, 3B, 3C--tested St. George materials
-showed metals As, Pb.

Visual Inspection of Hecla Pond

Hecla Pond: fenced, but gate not locked.

May have records on St. George Mining Company.

Liner collects drainage from Hecla Pond. Lined and bermed up.

Hecla Evaporation ditch and pond is lined and bermed. There was a sheen on top, approximtely 2 feet deep. Had constructed ditch to prevent runon from OMG operations.

Noted seepage on east sidr of pond from cap. Seepage is clear then crystallizes into whitish crystals. There were animal tracks nearby likely from coyote. Noted trickle was clear.

Part of pond is St. George, approximately the first 8 feet and then liner and the next approximately 8 feet of material would be Hecla placed waste. Camera malfunction.

liner/cobble interface

stormwater goes into colection pond down below. Significant erosion on cap.

Have fence, 2 strands barbed wire. Saw small scurrying critter on cap.

Noted significant erosion gullies on sides of pond.

Liquid directed into ditch around southwest side of pond--greenish in color (due to copper). Noted southwest corner seepage from pond, approximately 3 feet above wter level of pond is a ditch approximately 12 to 15 feet horizontal stretch. No free board.

Pond is approximately 75 feet long by 25 feet wide by 15 inches deep.

Donna: build up ditch and pond to prevent overflow as we observed.

Hecla: have built ditch to divert OMG water from pond. Cap material is clean, no wastes exposed.

Donna: concern for liner: ditch is leaching out green color; liner extent; did not appear due to washout of ditch berm that liner extended the full length of the ditch. There was overflow of both the pond and ditch mixing with ponded stormwater. There were also minor tears in the liner noted.

ASK DONNA: WHERE WAS HECLA DIRECTING THE STORM WATER OFF THE POND? HOW FAR WAS THE OLD CREEK BED FROM THE WASTE POND/PILE?

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Hecla Sampling

Dave: will pump up to top, maybe as early as tomorrow

Sampling: 47 Photos, 15 samples
Completed: 5:20 p.m.
Exit Time: 5:20 p.m.

There were no documents received from the facility. Get copy of chain-of-custody forms.

Photo Log

Photo	Description
1	Top of Hecla Cap on Pond
2	Top of Hecla Cap on Pond
3	Top of Hecla Cap on Pond
4	Evaporation Pond
5	Hecla
6	Evaporation
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	